(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 23 December 2004 (23.12.2004)

PCT

(10) International Publication Number WO 2004/110984 A1

(51) International Patent Classification7: C07C 235/20, A61K 31/16, A61P 3/00

(21) International Application Number:

PCT/SE2004/000964

(22) International Filing Date: 16 June 2004 (16.06.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 0314129.8

18 June 2003 (18.06.2003) GB

(71) Applicant (for all designated States except US): AS-TRAZENECA AB [SE/SE]; S-151 85 Södertälje (SE).

(72) Inventors; and

- (75) Inventors/Applicants (for US only): AURELL, Carl-Johan [SE/SE]; AstraZeneca R & D Södertälje, S-151 85 Södertälje (SE). DAHLSTRÖM, Mikael [FI/SE]; AstraZeneca R & D Mölndal, S-431 83 Mölndal (SE). LINDSTEDT-ALSTERMARK, Eva-Lotte [SE/SE]; AstraZeneca R & D Mölndal, S-431 83 Mölndal (SE). MINIDIS, Anna [SE/SE]; AstraZeneca R & D Södertälje, S-151 85 Södertälje (SE). OHLSSON, Bengt [SE/SE]; AstraZeneca R & D Mölndal, S-431 83 Mölndal (SE). STÅHLE, Erica [SE/SE]; AstraZeneca R & D Södertälje, S-151 85 Södertälje (SE).
- (74) Agent: ASTRAZENECA; Global Intellectual Property, S-151 85 Södertälje (SE).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,

MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: PHARMACEUTICALLY USEFUL SALTS OF CARBOXYLIC ACID DERIVATES

(57) Abstract: A compound selected from one or more of the following: a (1R,2S)-2-hydroxyindan-1-amine salt (25)-2-ethoxy-3-(4-{2-[hexyl(2-phenylethyl)amino]-2-oxoethoxy}phenyl)propanoic acid; an (2S)-2-ethoxy-3-(4-{2-[hexyl(2-phenylethyl)amino-2-oxoethoxyphenyl)propanoic L-arginine salt of acid; tert-butylamine $(2S) - 2 - ethoxy - 3 - (4 - \{2 - [hexyl(2 - phenylethyl) a mino-2 - oxoethoxyphenyl) propanoic$ salt of acid: a choline ethoxy-3-(4-{2-[hexyl(2-phenylethyl)amino]-2-oxoethoxy}phenyl)propanoic salt of (2S)-2acid: adamantylamine salt of (25)-2ethoxy-3-(4-{2-[hexyl(2-phenylethyl)amino]-2-oxoethoxy}phenyl)propanoic acid; an a N-benzyl-2-phenylethanaminium salt (2S)-2-ethoxy-3-(4-{2-[hexyl(2-phenylethyl)amino]-2-oxoethoxy}phenyl)propanoic ethanaminium salt of (25)-2-ethoxy-3-(4-{2-[hexyl(2-phenylethyl)amino]-2-oxoethoxy}phenyl)propanoic acid; or a tris(hydroxacid; ymethyl)methylamine salt of (2S)-2-ethoxy-3-(4-{2-[hexyl(2-phenylethyl)amino]-2-oxoethoxy}phenyl)propanoic acid.



WO 2004/110984